

ELECTRIC OSCILLATORY MACHINE

ABSTRACT OF THE DISCLOSURE

An oscillatory machine comprises a support having a load carrying surface and an opposite surface. Also included is an electric motor having an airgap through which lines of magnetic flux extend, and an armature coupled to the support. The armature is provided with at least two electrically conductive paths, each having at least one current carrying segment disposed in the airgap and substantially perpendicularly intersected by the lines of magnetic flux to produce thrust forces which act to move the armature and the support in two dimensions in a plane. Finally, a bearing support system suspends the armature in the air gap and is disposed between the support and the armature.

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